RIDOT TMC Incident Statistics
4/1/2011 To 6/30/2011

The Rhode Island transportation system serves 39 cities and towns: encompassing urban, suburban, and tourism areas. The Rhode Island Department of Transportation's Transportation Management Center (RIDOT TMC) has been addressing the problem of increasing congestion in Rhode Island by informing the traveler of crashes and unusual delays. In doing so, the TMC has provided measurable benefits to the transportation system, and has developed the technology and institutional awareness necessary to expand the Intelligent Transportation Systems (ITS) Program (called RhodeWays) to the benefit of Rhode Island travelers.

The RIDOT TMC maintains detailed statistics on incidents that we manage from our center. Because the data are entered by our TMC Operators, the statistics are dependent on what we can observe on the roadways with our equipment. Review and compilation of these statistics is done quarterly. By making these statistics available to you, we hope that you can learn more about the program and understand the benefit of the services we provide to the Rhode Island motoring public.

The types of incidents tabulated in this report include disabled vehicles, debris on the roadway, emergency roadwork, vehicle accidents, and vehicle rollovers. Additionally, a category exists for congestion delays that are outside of typical recurring congestion. The TMC does assist in information dissemination for planned events (such as construction) as well, but those types of events are not included in the statistics. Also, abandoned vehicles are not included since they tend to skew the statistics.

NOTE: After reviewing the data collection process, the RIDOT TMC has decided that the Incident Recovery Time statistic is too subjective and difficult to accurately track. Therefore, that data has been removed from this report. The data collection procedure will be modified starting in July 2011 to better conform with FHWA and industry best practices. Subsequent incident statistics reports will reflect the changes in data collection.

We hope you find this report interesting and that it helps in understanding the significant benefit that the RhodeWays program provides to the people who travel Rhode Island's roadways every day. Also, please remember to check the TMC website frequently for updates (http://www.tmc.state.ri.us), including construction and incident information.

RIDOT TMC Incident Statistics Report

1.   Peak Period Incident Statistics*

	AM Peak	PM Peak	Off-Peak	Total
Number of Incidents	225	344	423	992
Avg. Incident Duration (min)	60	33	39	42
Avg. Incident Clearance Time (min)	60	32	39	41
Avg. Incident Recovery Time (min)	0	0	0	0
# Detected by TMC Operators (CCVE)	108	79	105	292
# Detected by TMC, State Police	113	253	304	670
# Notified by RhodeWatchers	2	0	1	3
# of Messages Posted VMS	11	19	32	62
# of Messages Posted DMS	53	86	113	252
# of Messages Posted HAR	25	51	60	136
# of Messages posted Web	195	311	370	876
Avg. Delay Cost**	$253,894	$137,536	$165,660	$175,920
Total Delay Cost	$57,126,132	$47,312,520	$70,074,144	$174,512,796

* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

** Delay Cost is a function of incident duration, volume on the roadway, delay per person, and cost per hour of delay
for both commercial and personal vehicles. Average delay cost includes only incidents with a lane
blockage and represents average cost per incident.
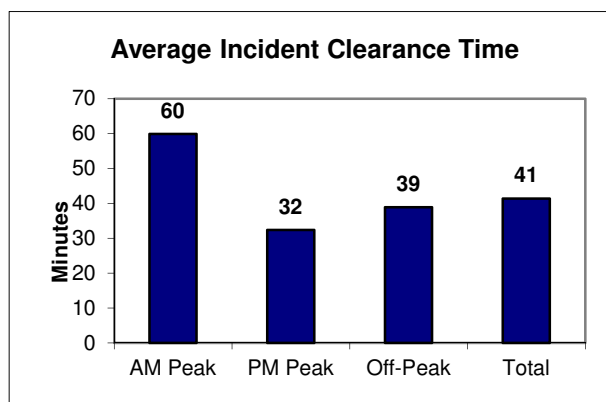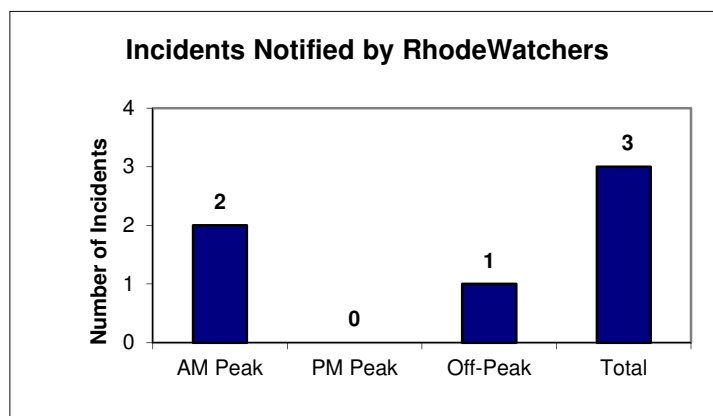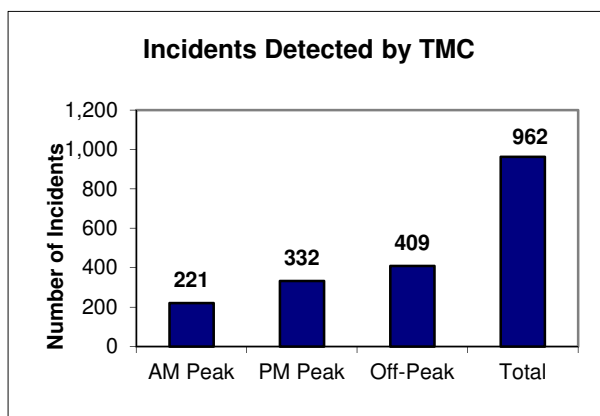
Incidents Detected by TMC

Incidents Notified by RhodeWatchers

Average Incident Clearance Time

NOTE: After reviewing the data collection process, the RIDOT TMC has decided that the Incident Recovery Time statistic is too subjective and difficult to accurately track. Therefore, that data has been removed from this report. The data collection procedure will be modified starting in July 2011 and this page will be further modified to reflect the forthcoming changes.

Note: Statistics in this report are only for incidents that the TMC reported or responded to. They do not include all incidents that occurred on Rhode Island roadways
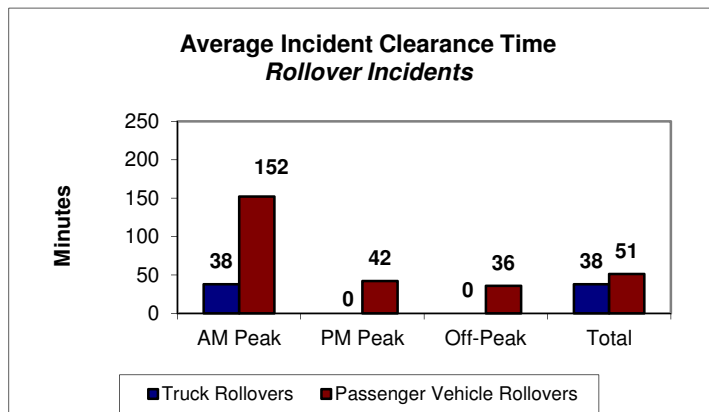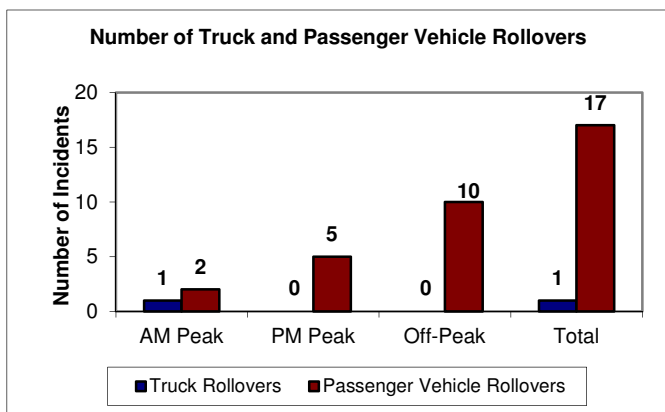
Incident Clearance Time is the time from the start of an incident (or when it is detected) to the time it is cleared from the roadway.

Incident Recovery Time is the time it takes for the roadway to be rid of residual delay following incident clearance. It is based on TMC Operator observation.

2. Rollover Incident Statistics*

	Trucks				Automobiles			
VEHICLES	AM Peak	PM Peak	Off-Peak	Total	AM Peak	PM Peak	Off-Peak	Total
No. of Rollovers	1	0	0	1	2	5	10	17
Avg. Incident Duration (min)	38	0	0	38	152	45	36	52
Avg. Incident Clearance Time (min)	38	0	0	38	152	42	36	51
~~Avg. Incident Recovery Time (min)**~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~2~~	~~0~~	~~1~~

* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

Number of Truck and Passenger Vehicle Rollovers

Average Incident Clearance Time
Rollover Incidents

Roadway	Exit Number	Number Of Rollovers
Interstate 295 Northbound	2	1
Interstate 295 Southbound	6	2
Interstate 95 Northbound	8A	1
Interstate 95 Northbound	18	1
Interstate 95 Northbound	17	1
Interstate 95 Northbound	7	1
Interstate 95 Northbound	8B	1
Interstate 95 Northbound	13	1
Interstate 95 Southbound	14	1
Interstate 95 Southbound	3A	1
Interstate 95 Southbound	10B	1
Route 004 Northbound	5	1
Route 004 Southbound	5A	1
Route 005 Northbound	N/A	1
Route 006 Westbound	N/A	1
Route 146 Northbound	N/A	2
TOTAL		**18**
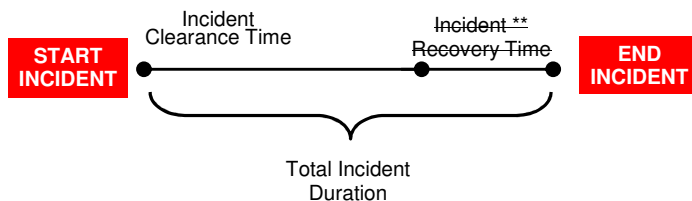
**After reviewing the RhodeWays data collection process, the RIDOT TMC has decided that the Incident Recovery Time statistic is too subjective and difficult to accurately track. Therefore, that data has been removed from this report. The data collection procedure will be modified starting in July 2011 and this page will be further modified to reflect the changes.
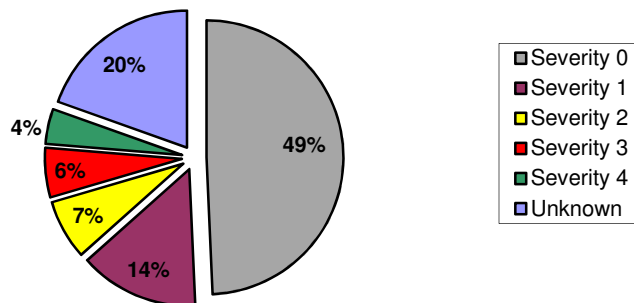
3.   Incidents by Severity Level

Severity Level*	No. of Incidents
Severity 0	489
Severity 1	140
Severity 2	70
Severity 3	58
Severity 4	41
Unknown	194
Total	*992*

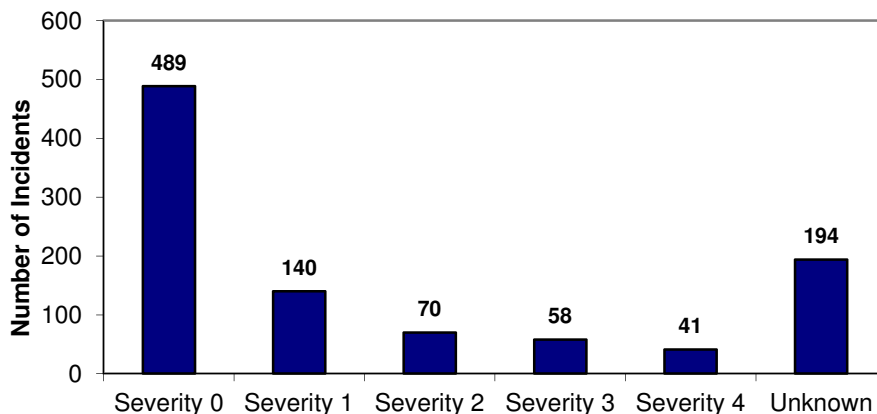**Number of Incidents with a Secondary Incident:** 6

Percentage of Incidents with a Secondary Incident: 0.60%

Note: A "secondary" incident is one that is the result of an earlier incident.

Percent of Incidents by Severity Level

- Severity 0 — 49%
- Severity 1 — 14%
- Severity 2 — 7%
- Severity 3 — 6%
- Severity 4 — 4%
- Unknown — 20%

Number of Incidents by Severity Level

Severity 0	Severity 1	Severity 2	Severity 3	Severity 4	Unknown
489	140	70	58	41	194

*Definition of Incident Severity Levels:

Severity 0: No injuries and no travel lanes blocked

Severity 1: 1/4+ travel lanes blocked with no injuries OR median/shoulder closed with injuries

Severity 2: 1/3 or 2/4+ lanes blocked OR Fire w/ 0 lanes closed OR hazardous materials (HAZMAT) w/ 0 lanes closed

Severity 3: 1/2 or 2/3 or 3/4+ lanes blocked OR Fire w/ 1/3 or 2/4 lanes closed OR
           Hazmat w/ 2/4 lanes closed

Severity 4: All travel lanes blocked OR fatality OR Hazmat w/ clean-up OR Fire w/ 1/2, 2/3, 3/4 lanes closed
           OR Structural damage w/ 1/3, 2/3+ lanes closed

*Unknown:* Incidents without a recorded severity level

Note: For travel lanes blocked terminology, "1/4" indicates 1 out of 4 lanes blocked

4. Incidents by Type

Incident Type	No. of Incidents
Vehicle Accident	522
Disabled Vehicle	411
Debris on Road	5
Congestion - cause unknown	0
Other	21
Vehicle Spinout	8
Emergency Road Work	4
Jack-Knifed Truck	0
Total Number of Incidents	971

5. Incidents by Injury Type

Injury Type	No. of Incidents
Minor	118
Serious	9
Fatality	1
Unknown	150
None	714
Total	992

Number of Incidents by Type

	Number of Incidents
Vehicle Accident	522
Disabled Vehicle	411
Debris on Road	5
Congestion - cause unknown	0
Other	21
Vehicle Spinout	8
Emergency Road Work	4
Jack-Knifed Truck	0

Percent of Incidents by Injury Type

Minor 11.9%
Serious 0.9%
Fatality 0.1%
Unknown 43.4%
None 43.8%
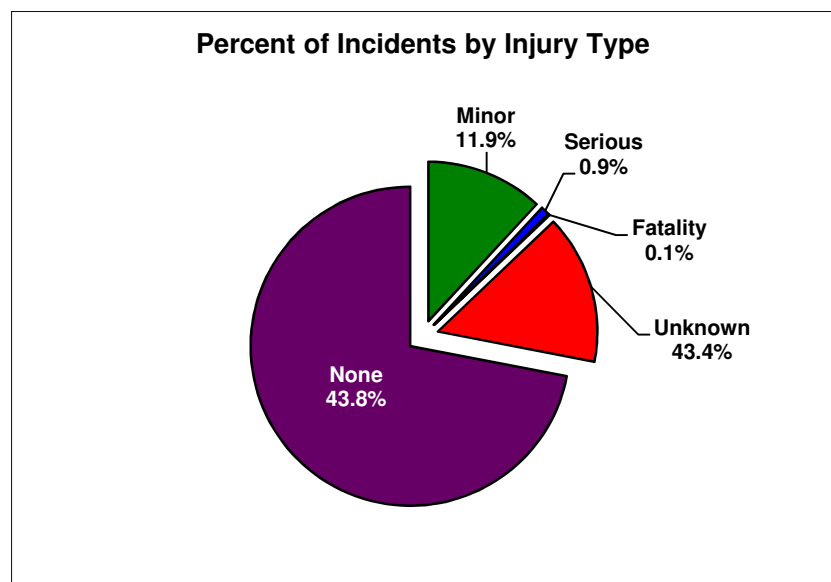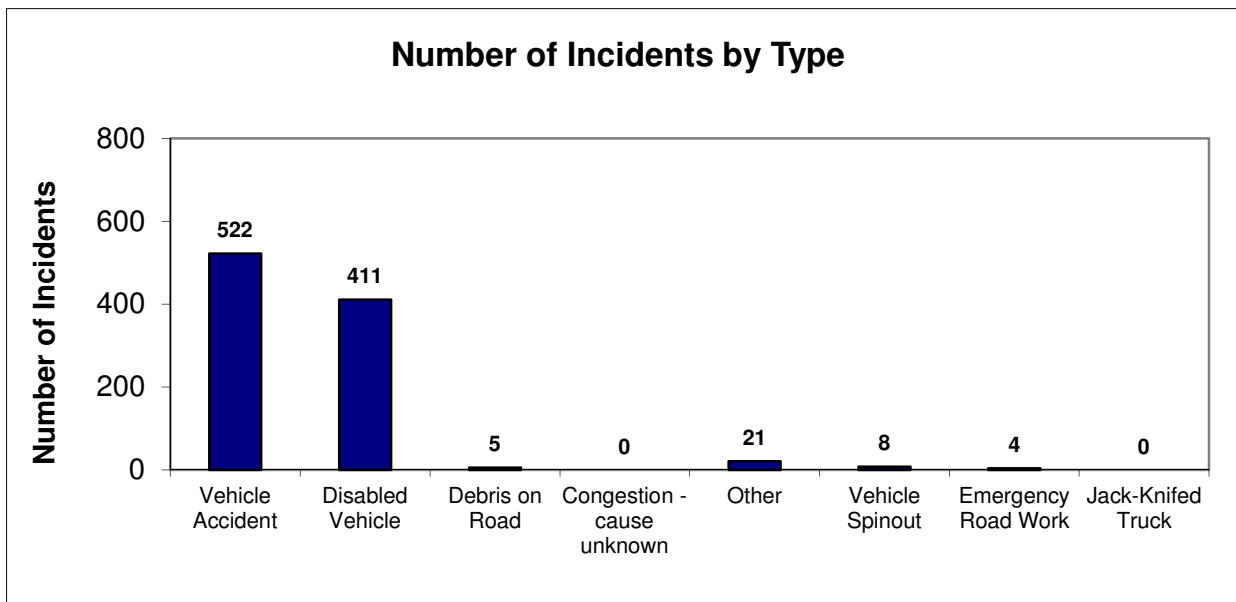
6. Incidents by Pavement and Weather Conditions

Pavement Condition	No. of Incidents
Dry	812
Wet	180
Icy	0
Snow-Covered	0
Flooded	0
Other	0
Total	*992*
Precipitation	
None	894
Light-moderate rain falling	79
Heavy rain falling	18
Light-moderate sleet falling	1
Heavy sleet falling	0
Light-moderate snow falling	0
Heavy snow falling	0
Total	*992*
Wind	
Calm to Moderate	979
Moderate to Strong	10
Gusts over 50 mph	0
Gusts over 75 mph	0
Hurricane	0
Other	2
N/A	1
Total	*992*
Visibility	
Clear	897
Light fog	18
Dense fog	3
Reduced- rain	73
Reduced-snow	0
Poor-heavy rain/sleet	1
Poor-heavy snow	0
Reduced-smoke	0
Other	0
N/A	0
Total	*992*

7. Incidents Detected by Primary Notifier on Selected Roadways

Roadway	Primary Notifier	No. of Incidents
I-195	TMC Operator	35
	State Police Scanner	45
	Local Fire Department	0
	Rhode Watcher	1
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	4
	Total	*85*
I-95	TMC Operator	191
	State Police Scanner	370
	Local Fire Department	3
	Rhode Watcher	1
	Media/MetroNetworks	1
	Traffic.com	0
	Transcom	0
	Other	46
	Total	*612*
I-295	TMC Operator	9
	State Police Scanner	34
	Local Fire Department	0
	Rhode Watcher	1
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	10
	Total	*54*

Roadway	Primary Notifier	No. of Incidents
Route 10	TMC Operator	21
	State Police Scanner	39
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	5
	Total	*65*
Route 146	TMC Operator	14
	State Police Scanner	42
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	12
	Total	*68*
Route 6	TMC Operator	14
	State Police Scanner	19
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	3
	Total	*36*

Number of Incidents Detected on Selected Roadways

Roadway	Number of Incidents
I-95	612
I-195	85
Route 10	65
Route 146	68
Route 6	36
I-295	54
Other	72
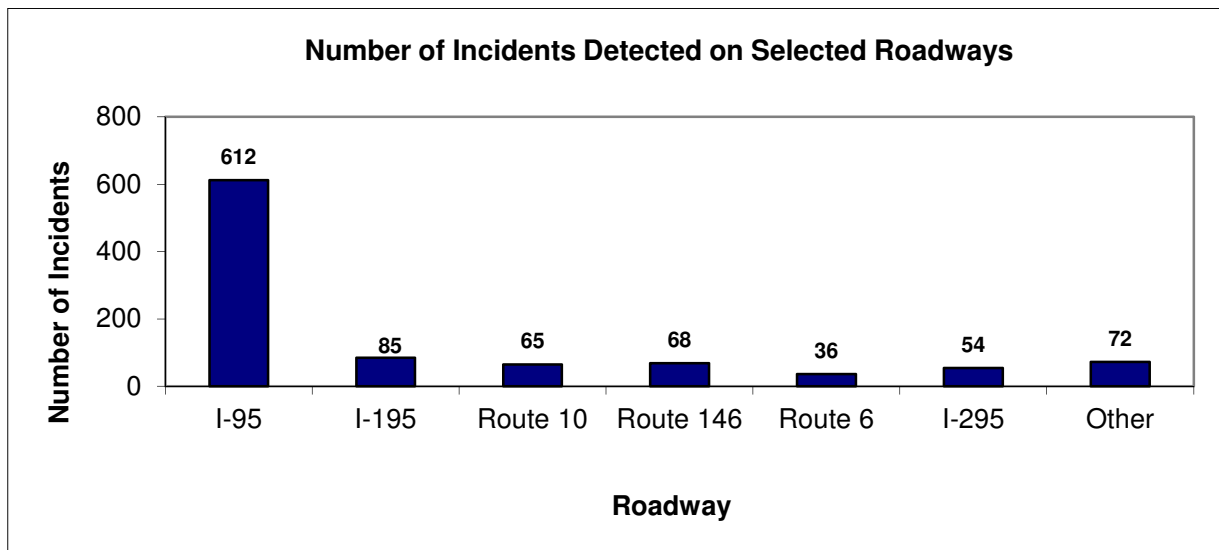
8. Incidents by Number of Vehicles Involved

No. of Vehicles Involved	No. of Incidents
1	9
2	567
3	332
4	64
5	15
6	3
7	1
8	0
9	0
10+	0
Unknown	1
Total Incidents	992

Number of Incidents by Vehicles Involved

- 1
- 2
- 3
- 4
- Unknown

0% · 1% · 7% · 34% · 58%
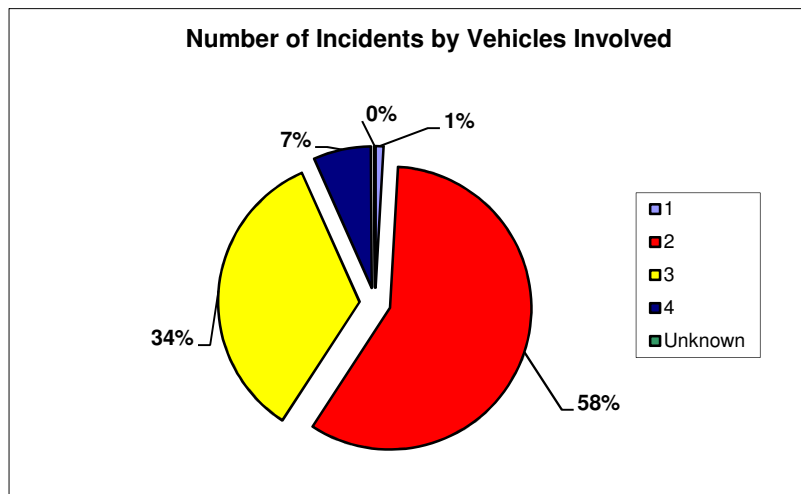
9. Incident Notification

Primary Notifier*	No. of Incidents
TMC Operator	292
Local Fire Department	3
RIDOT Maintenance	14
Media	1
Traffic.com	0
Local Police	5
Rhode Watcher	3
RISP	670
Transcom	0
Other	4
Total	992

*First notifier of the incident to TMC

Percent of Incidents by Primary Notifier

- Other, 0.4%
- Transcom, 0.0%
- TMC Operator, 29.4%
- Local Fire Department, 0.3%
- RIDOT Maintenance, 1.4%
- Media, 0.1%
- Traffic.com, 0.0%
- RISP, 67.5%
- Local Police, 0.5%
- Rhode Watcher, 0.3%
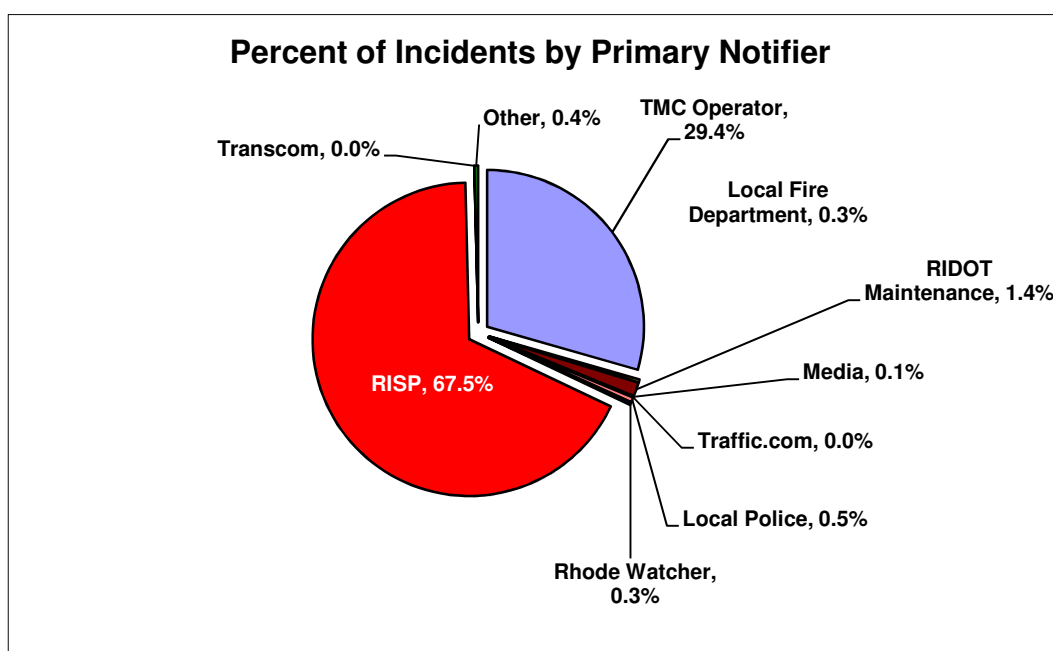
Number of Incidents by Primary Notifier
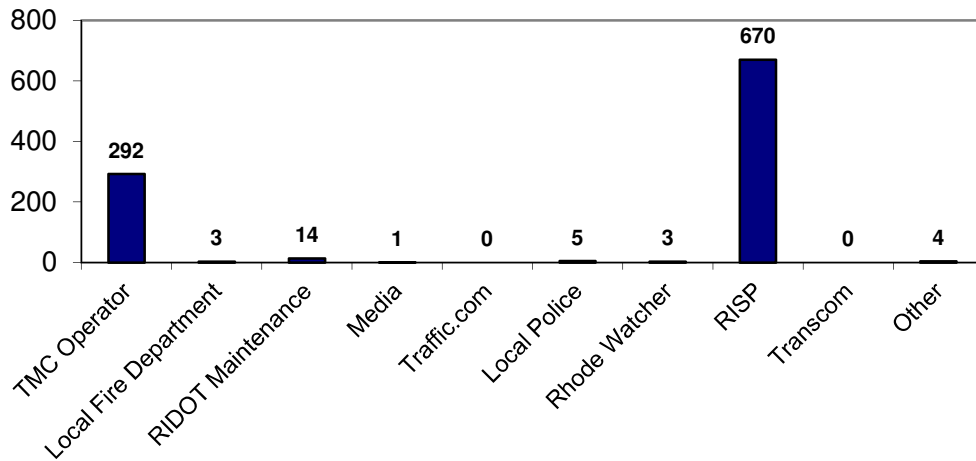
Notifier	No. of Incidents
RISP	741
TMC Operator	509
Rhode Watcher	3
Media	1
Local Police	6
Local Fire Department	3
Other	3
RIDOT Maintenance	15
Traffic.com	0
Transcom	0

Note: Primary notifier indicates the first notifier of the incident to the TMC. Additional notifiers are also logged, and are represented in the statistics for "all notifiers".

Number of Incidents by All Notifiers
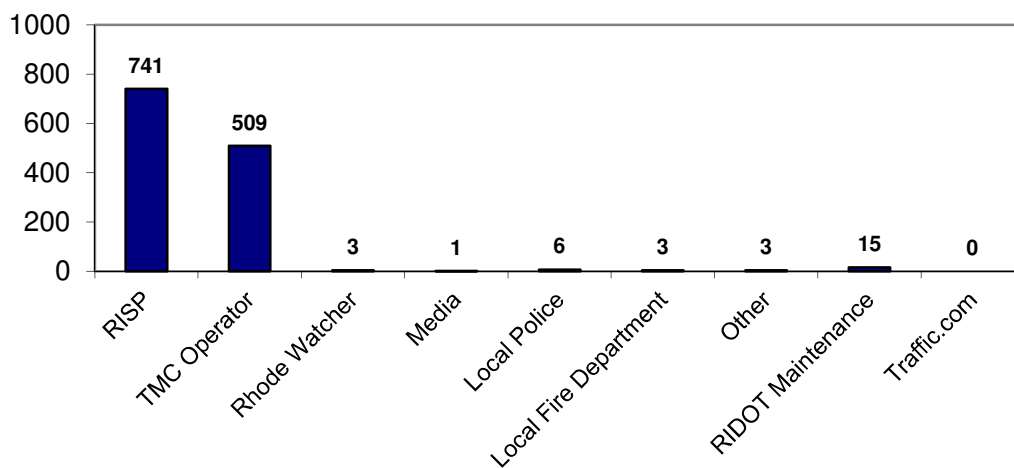
10. Incident Response

On-Scene Responding Agency	No. of Incidents	Percent of Total Incidents
State Police	825	83.17%
Tow	328	33.06%
Local Fire Department	193	19.46%
EMS	172	17.34%
Local Police	37	3.73%
Service Patrol	22	2.22%
Mass Highway	0	0.00%
DOT	15	1.51%
Hazmat	0	0.00%
DEM	0	0.00%
Connecticut DOT	0	0.00%
Construction	1	0.10%
Coast Guard	0	0.00%
Department of Health	1	0.10%
K-9	0	0.00%
RIPTA	0	0.00%

	# of Incidents
# Involved Equipment(HAR,VMS or CCVE)	301
# of VMS Messages	62
# of DMS Messages	252
# of HAR Messages	136
# of Web Messages	877

Note: Numbers and percentages in upper table indicate how many of the incidents during the month were responded to by the agency indicated. Note that multiple agencies may respond to an incident, so percentages do not add up to 100%.

Number of Incidents by On-Scene Responding Agency